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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,486	01/20/2004	Bruce M. Harper	004085.P043	4056
8791	7590	09/24/2007		
BLAKELY SOKOLOFF TAYLOR & ZAFMAN 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040				
			EXAMINER EWALD, MARIA VERONICA	
			ART UNIT 1722	PAPER NUMBER
			MAIL DATE 09/24/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/761,486

Applicant(s)

HARPER ET AL.

Examiner

Maria Veronica D. Ewald

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 27-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-30 is/are allowed.
- 6) ☒ Claim(s) 1,2,9,12 and 13 is/are rejected.
- 7) ☒ Claim(s) 3-8,10,11 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/25/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

13. Claims 27 – 30 are allowed. The following is an examiner's statement of reasons for allowance: It is noted that claim 27 recites elements in means plus function form. These elements have been interpreted as invoking 35 U.S.C. § 112, sixth paragraph, and thereby limited to the corresponding structure described in the specification and equivalents thereof. In re Donaldson, 16 F.3d1189, 1194, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994); MPEP § 2181. In this case, the "means for pre-heating an entire substrate and an entire embossable film disposed above the substrate, to an approximate embossing temperature" has been interpreted as a heater assembly (and equivalents thereof, as described in paragraphs 0033 and 0035 – 0036) wherein the heater assembly includes a stand that positions a heater box portion at a height level with die assembly, wherein box portion includes an opening to receive a disk holder tray as well as an opening near a top surface to allow a line of sight for microscope of visual assembly 470, wherein the heater assembly is positioned in close proximity to the imprinting assembly as described in paragraphs 0042 . The "means for transporting the substrate to an imprinting die assembly, having an embossing foil, while maintaining the approximate embossing temperature" has been interpreted as a robotic arm assembly and equivalents thereof, as described in paragraphs 0033 – 0034, 0036 and 0039.

Thus, the closest prior art references of Davis (U.S. 2002/0025408 A1) and Harper (U.S. 2005/0151300 A1), fail to teach or suggest the combination of elements as

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described above. Both references merely teach that a substrate with an embossable film can be pre-heated prior to stamping; however, both fail to teach specific elements of the heater or the transport assembly as described by Applicant.

Claims 3 – 8, 10 – 11 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: prior art fails to teach or suggest, either alone or combination, the assembly components in combination with the elements of claim 1, wherein the transporting device comprises a vacuum chuck coupled to a robotic arm; wherein the transporting device comprises a servo slide, such that the slide is comprised of a frame; a holder plate and at least two fingers to secure the substrate; wherein the die assembly is comprised of an elongated shaft and a ball bushing and a ring portion; wherein there is a gas actuation bladder coupled to the die assembly; and a vision device coupled to the assembly.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1 – 2, 9 and 12 – 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Mutti, et al. (U.S. 4,778,372). Mutti, et al. teach an assembly comprising: a heater to pre-heat an *entire substrate and an entire embossable film*, disposed above the substrate, to an approximate embossing temperature (item 1 – figure 1; column 5, lines 40 – 45, 55 – 68); a die assembly having an embossing foil to imprint the embossable film (item 3 – figure 1; column 6, lines 50 – 68); and a heat tunnel disposed between the heater and the die assembly to maintain the approximate embossing temperature (item 2 – figure 1; column 5, lines 65 – 68; column 6, lines 1 – 10); wherein the assembly is further comprised of a transporting device for the substrate (column 6, lines 14 – 24; column 8, lines 42 – 65); wherein there is a cooling station disposed near the die assembly (column 7, lines 1 – 5, 35 – 40); wherein the heat tunnel comprises an inductive heat tunnel (column 5, lines 67 – 68) and wherein the heat tunnel comprises an IR heat tunnel (column 5, lines 65 – 68).

Response to Arguments

15. Applicant's arguments, see pages 6 – 7, filed June 25, 2007, with respect to the rejection(s) of claim(s) 1 – 30 under 102(b) and 103(a), respectively have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Mutti, et al. Mutti, et al. teach complete heating using a pre-heating device of a multi-layered foil, followed by indirect heating via a heat tunnel prior to any molding.

Regarding the previously-cited references of Fujii (U.S. 5,571,473) and Nakano, et al. (U.S. 6,482,279), Applicant argued that neither reference teaches a heater capable of heating an entire substrate and embossable film. Examiner agrees. With respect to the reference of Fujii, Fujii teaches the use of a pre-heater with protrusions, which conform to the portion(s) of the sheet to be heated and thus, the configuration and dimensions of the protrusion dictate the magnitude of the heating and specifically, the peripheral area of the sheet is not heated. With respect to the reference of Nakano, et al., Applicant argued that Nakano, et al. only teaches heating of the substrate during stamping, and is silent with respect to the *means for preheating*. Examiner agrees with this point as well. Furthermore, with respect to the rejection of independent claim 1 over the reference of Nakano, et al. in view of Ho (U.S. 2004/0238972), Applicant argued that the combination of the references teaches away from the primary solution offered by Nakano, et al., since Nakano, et al. only teaches that the temperature at the surface of the substrate is elevated, not the entire substrate itself is completely heated. On the other hand, Ho teaches the use of a heat tunnel (in lieu of any pre-heating to heat and maintain the temperature of the entire substrate) and also teaches away from the use of any pre-heating device. Thus, Examiner notes that the combination of Nakano, et al. in view of Ho does not suggest the apparatus as claimed by Applicant.

With respect to the rejection of claims 27 – 30 as anticipated by Nakano, et al., Applicant argued that Nakano, et al. is silent with respect to any pre-heating, only heating while the substrate is being embossed or stamped. Examiner agrees and thus, as stated previously, Examiner has indicated claims 27 – 30 allowable noting the

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"means plus function" language as supported by structural elements and equivalents thereof in the specification.

Conclusion

16. Applicant's amendment, which has changed the scope of the claims, necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria Veronica D. Ewald whose telephone number is 571-272-8519. The examiner can normally be reached on M-F, 8 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta can be reached on 571-272-1316. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MVE


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